Approved For Release 2004/02/04: CIA-RDP96-00788R000600300017-6

AIRCRAFT CRASH - ECUADOR

DTG

17 FEB 81, Approx. 0700 Local

TYPE

UH1H, 1973 Mode1

TAIL NUMBER

73 - 21711

CALLSIGN

ARMY 711

CREW

SGFOIA3

193rd INF BDE 193rd INF BDE SVC CO 7th SFG

APPROX. LOCATION

0422 South 7911 West (Was on flight between LOJA,

Ecuador and VALOR, Peru)

PO Box 482, Fort Worth, Texas 70 Telephone: (817) 280-2011

PRESIDENT:

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pany's name was changed to Bell Helicopter Textron on 1 Reflecting the fact that Bell Helicopter Company was the largest operating division of Textron Inc, the com-

military and commercial single- and twin-engined versions USA for more than 25 years, after receiving the first Production at Fort Worth is concerned primarily with turbine-powered UH-1 Iroquois, the AH-1 HueyCobra armed helicopter developed from the UH-1, and military and commercial versions of the Model 206 JetRanger. The Bell 47, in continuous production in the helicopter Approved Type Certificate from the CAA or 8 March 1946, is no longer in production by Bell. January 1976. of the

Versions of the UH-1 are built under licence by Agusta in Italy and Fuji in Japan (which see). Bell also has licence agreements with the Republic of China, covering coproduction of Model 205 general-purpose helicopters, and with the government of Australia, covering the production of Model 206B-1 Kiowas for the Australian Army. Prime contractor in Australia is the Commonwealth Aircraft Corporation (which see).

aircraft achieved the first full in-flight conversion by a Since 1958, when Bell's Model XV-3 tilt-rotor research machine of this configuration, Bell engineers have continued research in this field and have completed recent US Army/USAE/NASA contracts to investigate proprotor and folding proprotor technology. The contracts included manufacture and wind tunnel testing of examples of both types of rotor.

owards the end of 1972, Bell and one other company received contracts from NASA and the US Army for the design of a tilt-rotor VTOL research vehicle. In May 1973 Bell announced that its Model 301 proposal had been selected for development. Two examples were ordered, with the US Army designation XV-15.

During 1972 Bell achieved a major breakthrough in the elimination of vibration in helicopters with what is known as the nodalisation concept, flight test data and analytical results suggesting that 70 to 90 per cent vibration isolation was practicable. This concept is based on the scientific fact that any beam subjected to vertical vibratory forces, such as those induced by a rotor, will develop flexing to produce a wave form. Points of no relative motion, called the nodal

so convincing that Bell decided to utilise this rotor-induced vibration. Flight tests of a Model 206 set-Ranger with its fuselage suspended from a nodalised beam Noda-Matic technique on new production helicopters, beginning with the Model 2061. LongRanger and Model

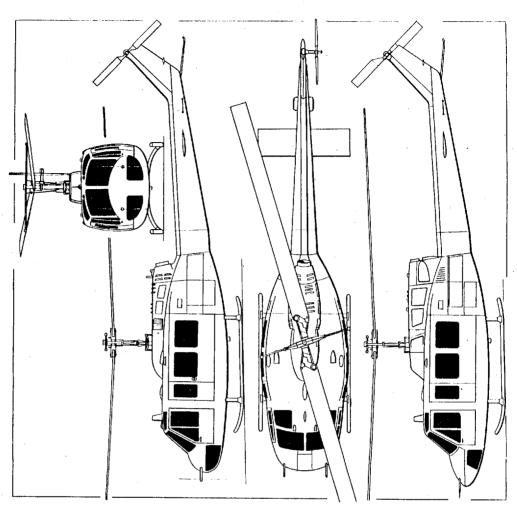
Bell Helicopter Textron is responsible for management of Bell Operations Corporation, newly formed to cooperate with the government of Iran in establishing a helicopter manufacturing industry in that country. Further details of this programme can be found under the entry for ran.

Approximately 9,000 people were employed by Bell at the beginning of 1977. The company has produced more than 22,000 helicopters.

age, increased cabin space to accommodate a much larger number of passengers. and other changes. The following Although basically similar to the earlier Model 204 (see 1971-72 Jane's), the Model 205 introduced a longer fuselmilitary versions have been built:

Canadian il illany designa ion, omina ild.

litres (520 US gallons). Relocation of the fuel cells turboshaft, 14.63 m (48 ft) rotor, normal fuel capacity of 832 litres (220 US gallons) and overload capacity of 1,968 increases cabin space to 6.23 m3 (220 cu ft), providing sufficient room for a pilot and twelve troops, or six litters First YUH-1D flew on 16 August 1961 and delivery to US UH-1D. This US Army version of the Model 205 Iroquois has an 820 kW (1.100 shp) Lycoming T53-L-11 and a medical attendant, or 1.815 kg (4,000 lb) of freight.



Bell UH-1H Iroquois, with additional side view of UH-1N (bottom) (Pilor Press)

field units began on 9 August 1963. The UH-1D perseded in production for the US Army by the

1H. but 352 UH-1Ds were built subsequently under se in Gentlany for the German Army and Air Force. e contracte was Dornier.
1-1H. Following replacement of the original T53-L-rookshift of the 1.044 kW (1,400 kpp) T53-L-13. the ed version of the Model 205 produced by Bell for the kriny was accedesignated UH-1H. Deliveries of an

clic of Anna produced 118 UH-1Hs for the railst Charles Army, with much of the manufactured assem® process being carried out at Taichung, H continued in 1977 to satisfy export orders.

118. Singar to UH-1H, for Mobile Command, hian Armed Forces. First of ten delivered on 6 March

announced on 4 November 1970 that a it (generally similar to the UH-1H) for use as local escue hel@pters. Deliveries were completed during received from the USAF for 30 HH-1H Originally designated CUH-1H.

1H. It wise announced on 4 Nove: I had he are received from the US/

commerced Model 205A-1 is described separately.

Following details refer specifically to the military H.

Single-rader general-purpose helicopter.

System. One of extraded all-metal semi-rigid main rotor is interciting geable blades, built up of extruded minitum segres to main rotor blades. Underslung reart right engles to main rotor blades. Underslung reart and the Two-blade all-metal tail rotor of extrom Missing and hub. Two-blade all-metal tail rotor of extrom Missing and the result of the minitum segres.

ismission atting 820 kW (1,100 shp). Main rotor

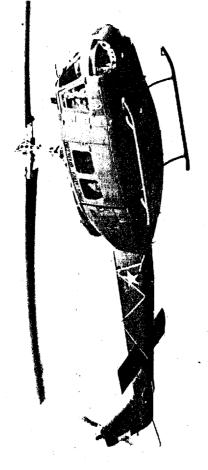
294-3240 AGE: Contional all-metal semi-monocoque Ture.

CREACE: Shall synchronised elevator on rear fusel-connected to the cyclic control to increase allow-CG travel.

Sear: Tubular skid type. Lock-on ground handwheels and inflated nylon float-bags available.

PLANT: One 1,044 kW (1,400 shp) Lycoming L-13 turboshaft mounted aft of the transmission in of the fuselage and enclosed in cowlings. Five onnected rubber fuel cells, total capacity 832 litres US gallons). Overload fuel capacity of 520 US as obtained by installation of kit comprising two itre (150 US gallon) internal auxiliary fuel tanks

sufficient room for pilot and 11-14 troops, or six and a medical attendant, or 1,759 kg (3,880 lb) of . Crew doors open forward and are lettisonable. "ODATION: Cabin space of 6-23 m3 (220 cu ft) proonnected with the basic fuel system.



Bell UH-1H Iroquois of the Brazilian Air Force (Ronaldo S. Olive)

Max level and cruising speed

110 knots (204 km/h; 127 mph) 110 knots (204 km/h; 127 mph) Econ cruising speed at 1,735 m (5,700 ft)

488 m (1,600 ft)/min Hovering ceiling in ground effect 4,145 m (13,600 ft) 3,840 m (12,600 ft) Hovering ceiling out of ground effect Max rate of climb at S/L Service ceiling

335 m (1,100 ft) 276 nm (511 km; 318 miles) Range with max fuel, no allowances, no reserves, at S/L

BELL MODEL 205A-1

The Model 205A-1 is a fifteen-seat commercial utility (1,400 shp) Lycoming T5313A turboshaft, derated to 932 External load capacity in flying crane role is 2,268 kg helicopter developed from the UH-1H, with 1,044 kW kW (1,250 shp) for take-off. It is designed for rapid conversion for alternative air freight, flying crane, ambulance, rescue and executive roles. Total cargo capacity is $7.02~\mathrm{m}^3$ (248 cu ft) including baggage space in tailboom, with 2:34 m (7 ft 8 in) by 1.24 m (4 ft 1 in) door openings on each side of the cabin to facilitate loading of bulky freight. (5.000 lb). The ambulance version can accommodate six litter patients and one or two medical attendants.

The description of the Bell UH-1H applies also to the Normal fuel capacity is 814 litres (215 US gallons); optional capacity is 1,495 litres (395 US gallons).

Model 205A-1, except for the following details: Type: Fifteen-seat commercial utility helicopter. ELECTRONICS AND EQUIPMENT: Standard equipment cator, gyro compass, master caution panel, bleed air heater, force trim hydraulic boost controls, soundproof headliner, dual windscreen wipers, cabin and envine fire includes vertical gyro system, 5 in gyro attitude indi-

4,309 kg (9,500 lb) Max T-O weight, external load 4,763 kg (10,500 lb) Weight empty, equipped Normal T-O weight WEIGHTS:

110 knots (204 km/h; 127 mph) Max level speed from S/L to 915 m (3,000 ft)

Performance (at normal T-O weight):

110 knots (204 km/h; 127 mph) Max cruising speed at S/L

Max cruising speed at 2,440 m (8,000 ft)

512 m (1,680 ft)/min 96 knots (179 km/h; 111 mph) Max vertical rate of climb at S/L 259 m (850 ft)/min 4,480 m (14,700 ft) Hovering ceiling in ground effect 3,170 m (10,400 ft) Max rate of climb at S/L Service ceiling

1,830 m (6,000 ft) Hovering ceiling out of ground effect Range at S/L, at max cruising speed

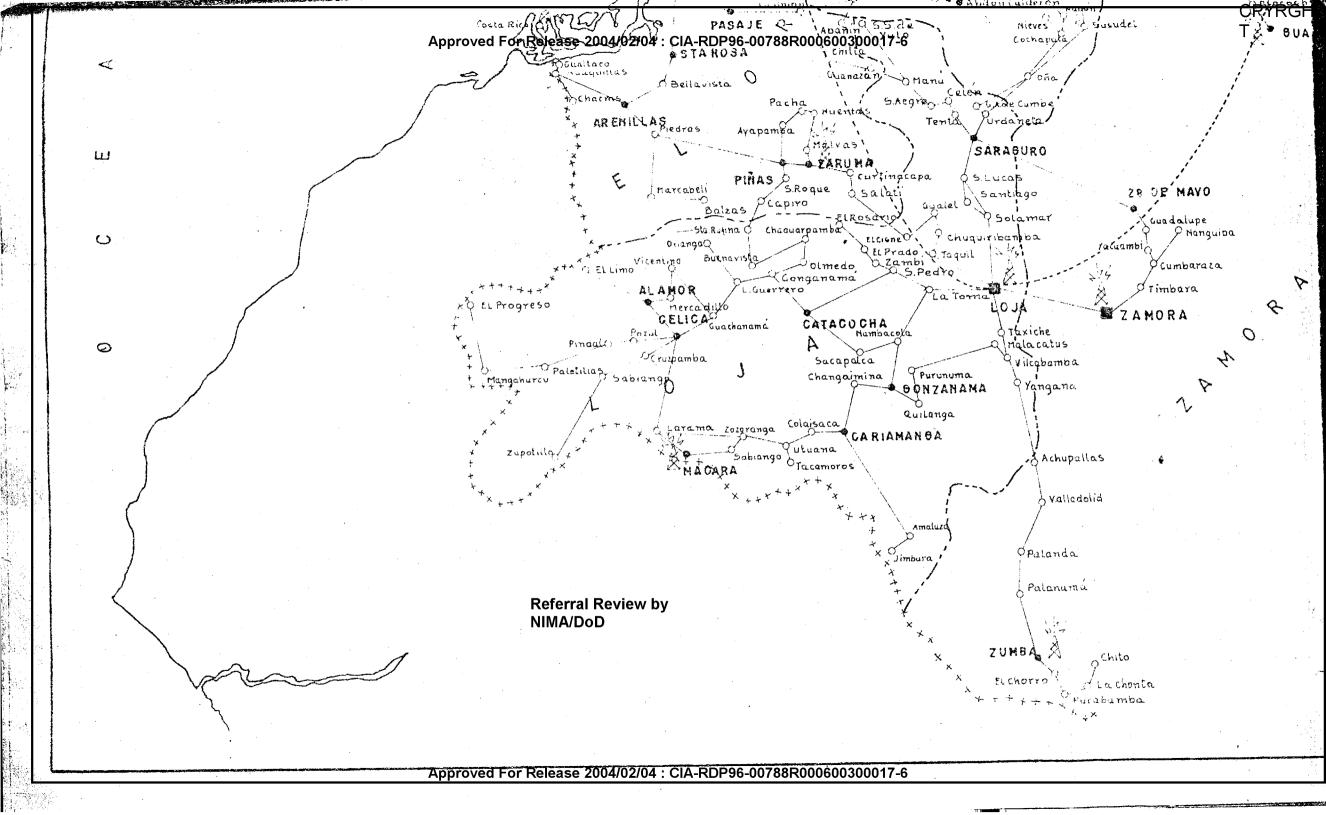
270 nm (500 km; 311 miles) Range at 2,440 m (8,000 ft) at max cruising speed, no 298 nm (553 km; 344 miles) reserves

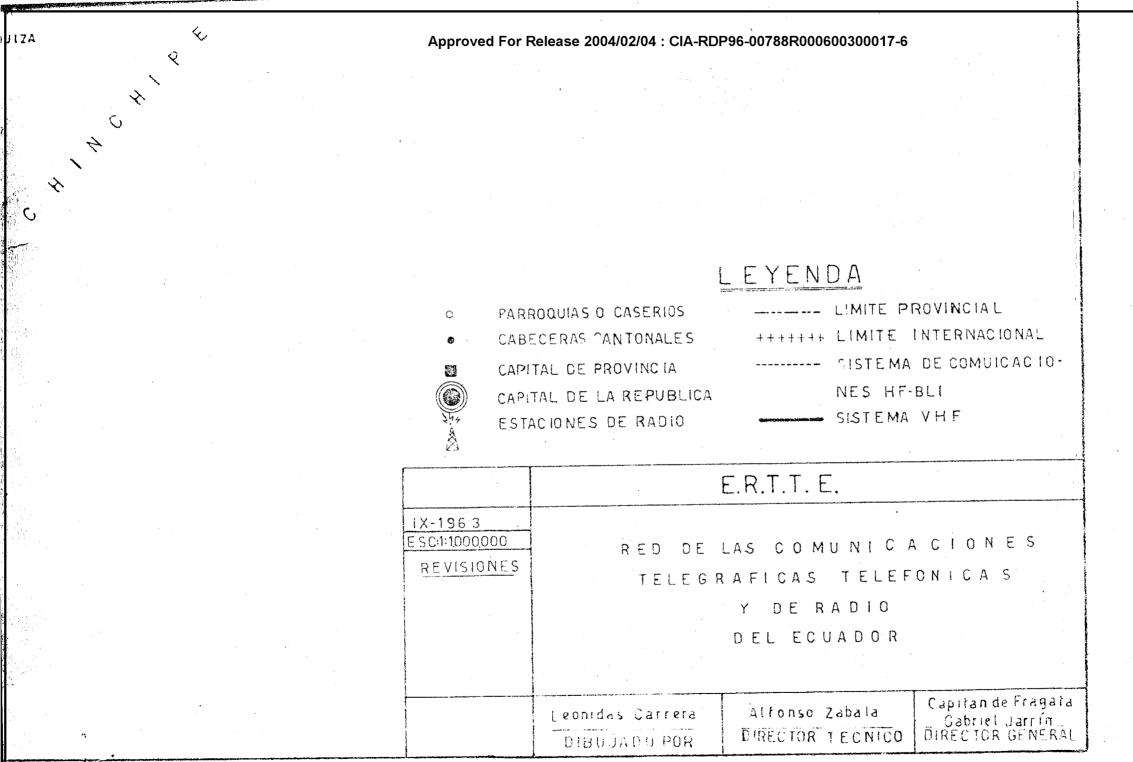
BELL MODEL 206B JETRANGER II

In the Spring of 1971, Bell began delivery of the Model duction the lower-powered Model 206A JetRanger; of which 660 were delivered. Military 206B-1 Kiowas 206B JetRanger II, which subsequently replaced in proassembled in Australia are to Model 206B standard.

Power plant of the Model 206B JetRanger II is the Allison 250-C20 turboshaft, which Bell was able to install with minimal modification of the original airframe to meet altitude conditions. This enabled Bell to offer modification requests for higher performance under hot-day/highkits to convert Model 206As to JetRanger II standard, simultaneously with production of new aircraft.

The uprated power plant increases power-limited air-





CPYRCL

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Bell's 214ST:

the powerful new super transport getting ready to join the Bell Air Mobile team

A new, super transport helicopter, with more horsepower, increased troop carrying capacity, and able to deliver heavier loads faster and higher than ever...even on the hottest days...Bell's 214ST twin adds a whole new operational capability to military forces.

Now in test, the 19-place 214ST is being hailed as the advanced manpower, ordnance and logistics mover needed for the 1980s.

Joined with the 206 for reconnaissance and command and control, the AH-1 Cobra for fire support, and the UH-1H and 214B medium transports, this newest, most powerful Bell super transport presents an unequalled air mobile team for total force deployment in any weather, in any environment.



peacekeepers
the world over
depend on Bell
HELICOPTER

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Approved For Release 2004/02/04 : CIA-RDP96-00788R000600300017-6 UH-1H (1973) TAIL* 73-21711 17 FEB 81 G 0700 LOCAL TIME CREW: SGFOIA3

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First town to be visited:

1. Las Aradas

04 degrees, 21 minutes, 45 seconds South 79 degrees, 23 minites, 50 seconds West

Closer to the center of greatest interest:

2. La Laja

04 degrees, 26 minutes, 05 seconds South /4)
79 degrees 27 minutes, 30 seconds West

3. The four corners of the area to be searched:

1. 04 degrees, 27 minutes, 30 seconds South79 degrees, 26 minutes, 25 seconds West

2. 04 degrees, 27 minutes, 30 seconds South
79 degrees, 24 minutes, 50 seconds West

√ 3. 04 degrees, 30 minutes, 00 seconds South 79 degrees, 24 minutes, 50 seconds West

4. 04 degrees, 30 minutes, 00 seconds South79 degrees, 26 minutes, 25 seconds West

4. Center of the area of greatest interest

1. 04 degrees, 28 minutes, 30 seconds South (7) 79 degrees, 25 minutes, 40 seconds West